



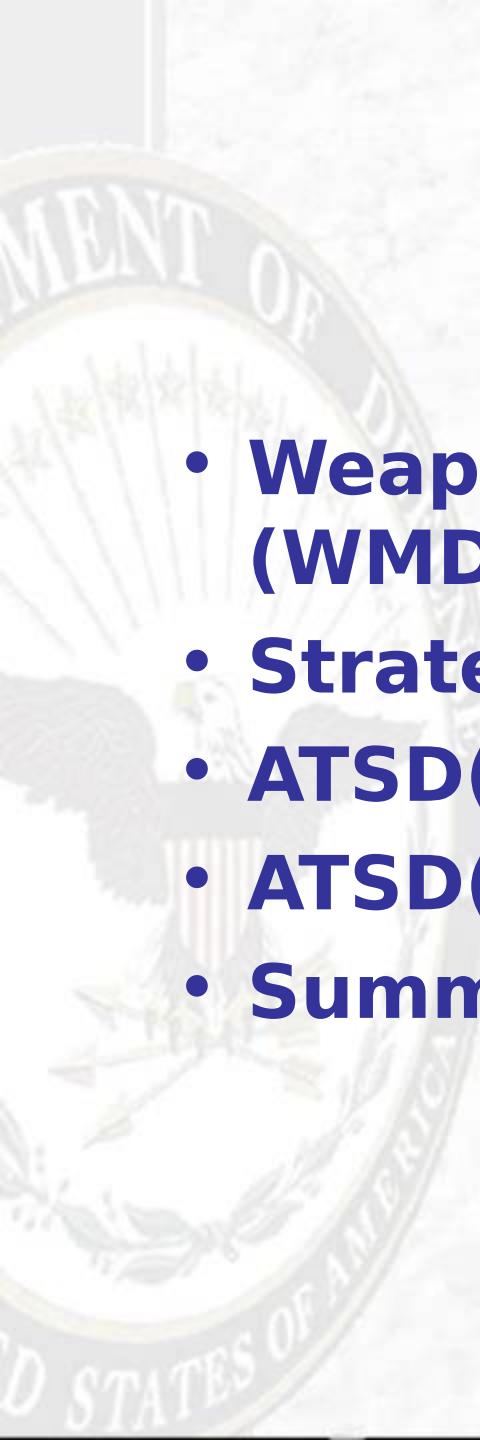
The seal of the Department of Defense is located on the left side of the slide. It is a circular emblem. The outer ring is gold with the words "DEPARTMENT OF DEFENSE" in white. The inner circle is blue with a golden eagle perched on a shield. The shield has vertical stripes and a laurel wreath at the bottom. A sunburst of stars is behind the eagle. The bottom of the seal has the words "UNITED STATES OF AMERICA" in a circular pattern.

# **Combating Weapons of Mass Destruction: *Defeating Current and Future Threats***

**Dr. Dale Klein**

**Assistant to the Secretary of Defense  
for Nuclear and Chemical and  
Biological Defense Programs**

**February 1, 2006**



# *Outline*

- **Weapons of Mass Destruction (WMD)**
- **Strategy for Combating WMD**
- **ATSD(NCB) Mission**
- **ATSD(NCB) Programs**
- **Summary**

# **WMD Threat Perspective**

***“On September the 11th, 2001, America and the world witnessed a new kind of war. We saw the great harm that a stateless network could inflict upon our country, killers armed with box cutters, mace, and 19 airline tickets. Those attacks also raised the prospect of even worse dangers -- of other weapons in the hands of other men. The greatest threat before humanity today is the possibility of secret and sudden attack with chemical or biological or radiological or nuclear weapons.”***



***President George W. Bush,  
February 11, 2004***

# Weapons of Mass Destruction



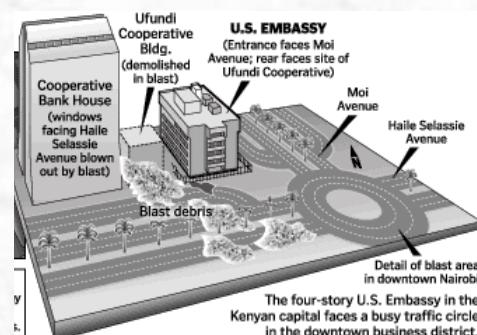
Nuclear



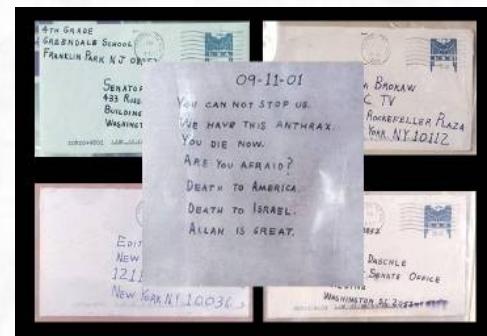
Radiological



Chemical



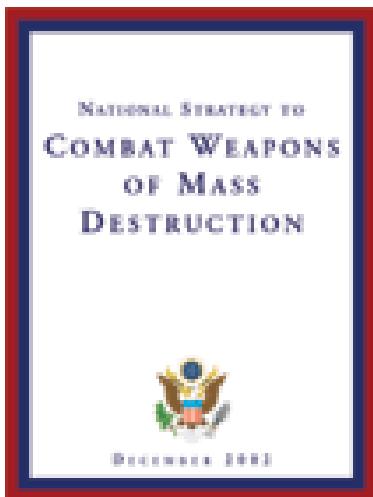
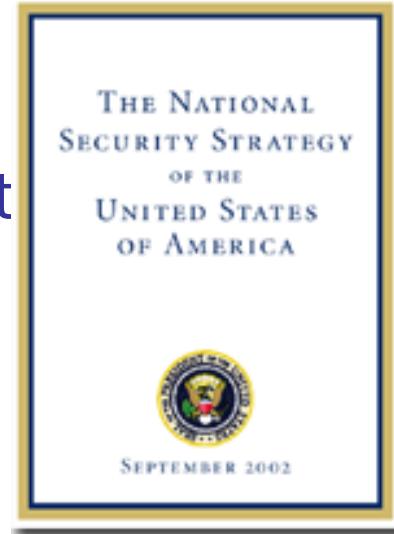
High Explosives



Biological

# Guidance

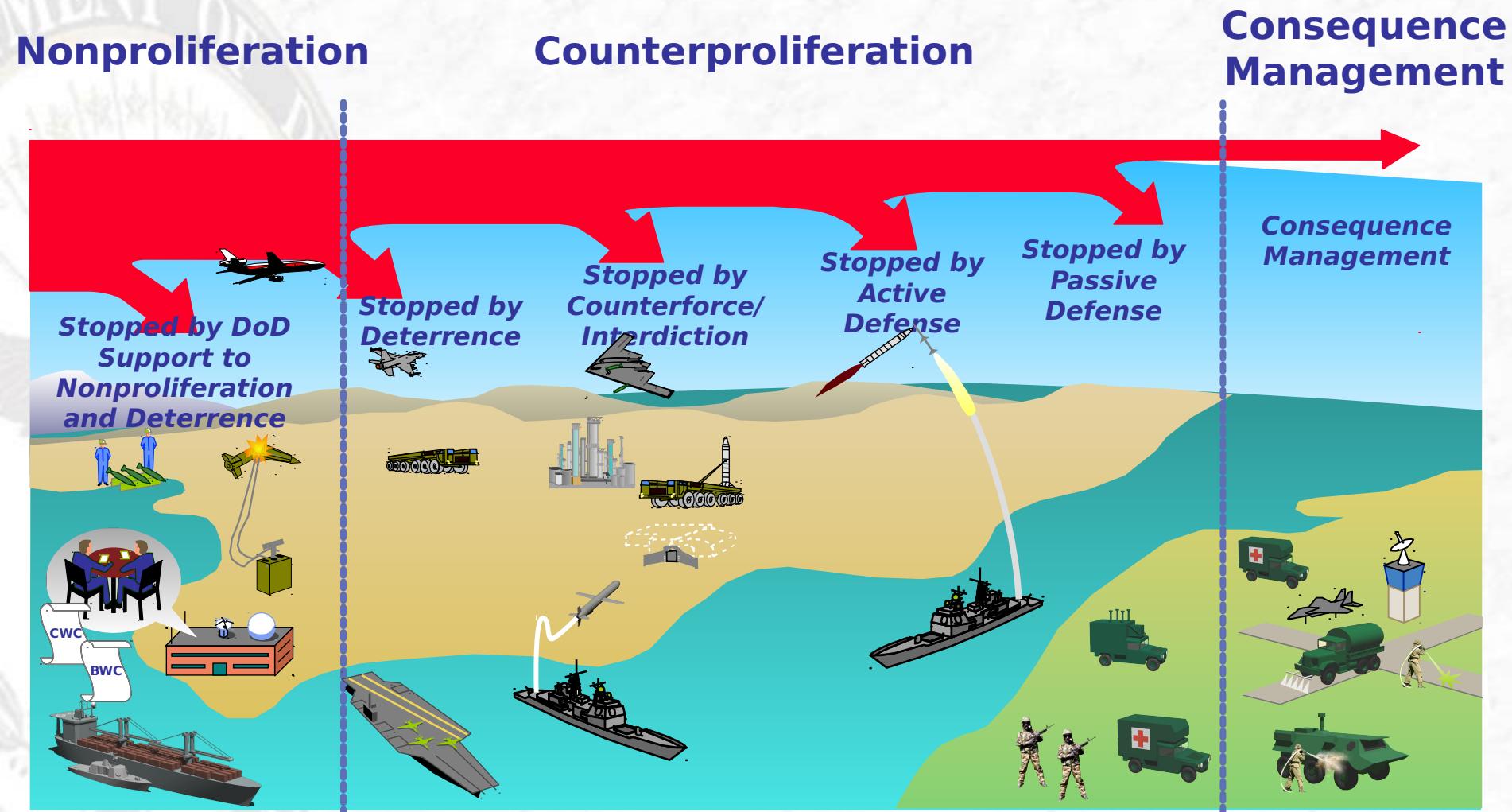
- National Security Strategy of the United States of America



- National Strategy to Combat Weapons of Mass Destruction

- National Defense Strategy

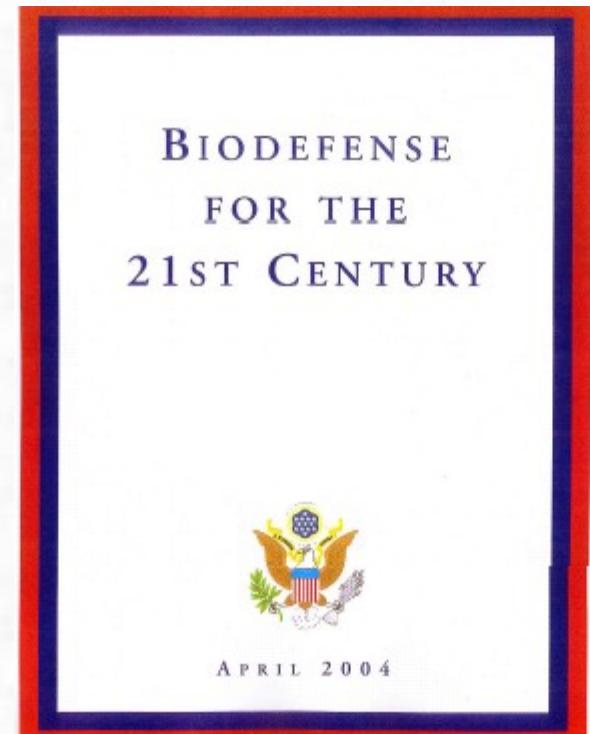
# Strategy for Combating WMD



# National Strategies Addressing Emerging Threats

***Biodefense for the 21<sup>st</sup> Century, The White House, April 2004  
(NSPD-33/HSPD-10)***

- “Preventing and controlling future biological weapons threats will be even more challenging...”
- “The proliferation of biological materials, technologies, and expertise increases the potential for adversaries to design a pathogen to evade our existing medical and non-medical countermeasures...”



# **ATSD(NCB)**

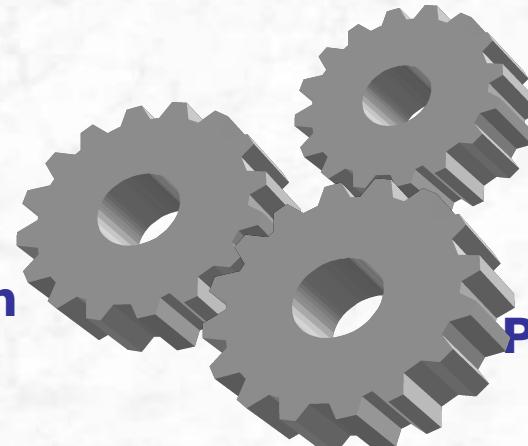
- Advise SECDEF on policies and plans affecting WMD threat reduction
- Provide Oversight of DoD Nuclear, Chemical and Biological Defense Programs

**DoD Decision  
Support Processes**

**Defense  
Acquisition  
System**

**Joint Capabilities Integration  
and Development System  
(JCIDS)**

**Planning,  
Programming,  
Budget and  
Execution  
System (PPBES)**



# **ATSD(NCB)**

**Secretary of Defense**

**Under Secretary of Defense for  
Acquisition, Technology  
and Logistics**

**ATSD  
(NCB)**

# ATSD (NCB)

**Assistant to the Secretary of Defense  
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Dr. Dale E. Klein

**Counterproliferation, Cooperative Threat Reduction and Treaty Manager**  
Principal Deputy,  
Dr. Arthur T. Hopkins

**Defense Threat Reduction Agency**  
Director,  
Dr. James Tegnelia

**Chemical and Biological Defense and Chemical Demilitarization Programs**  
Special Assistant,  
Mr. Jean Reed

**Nuclear Matters**  
Deputy,  
Mr. Steve Henry

# **ATSD(NCB)**

- Cooperative Threat Reduction
- Treaty Support
- Chemical Demilitarization
- Chemical and Biological Defense
- Defense Threat Reduction Agency



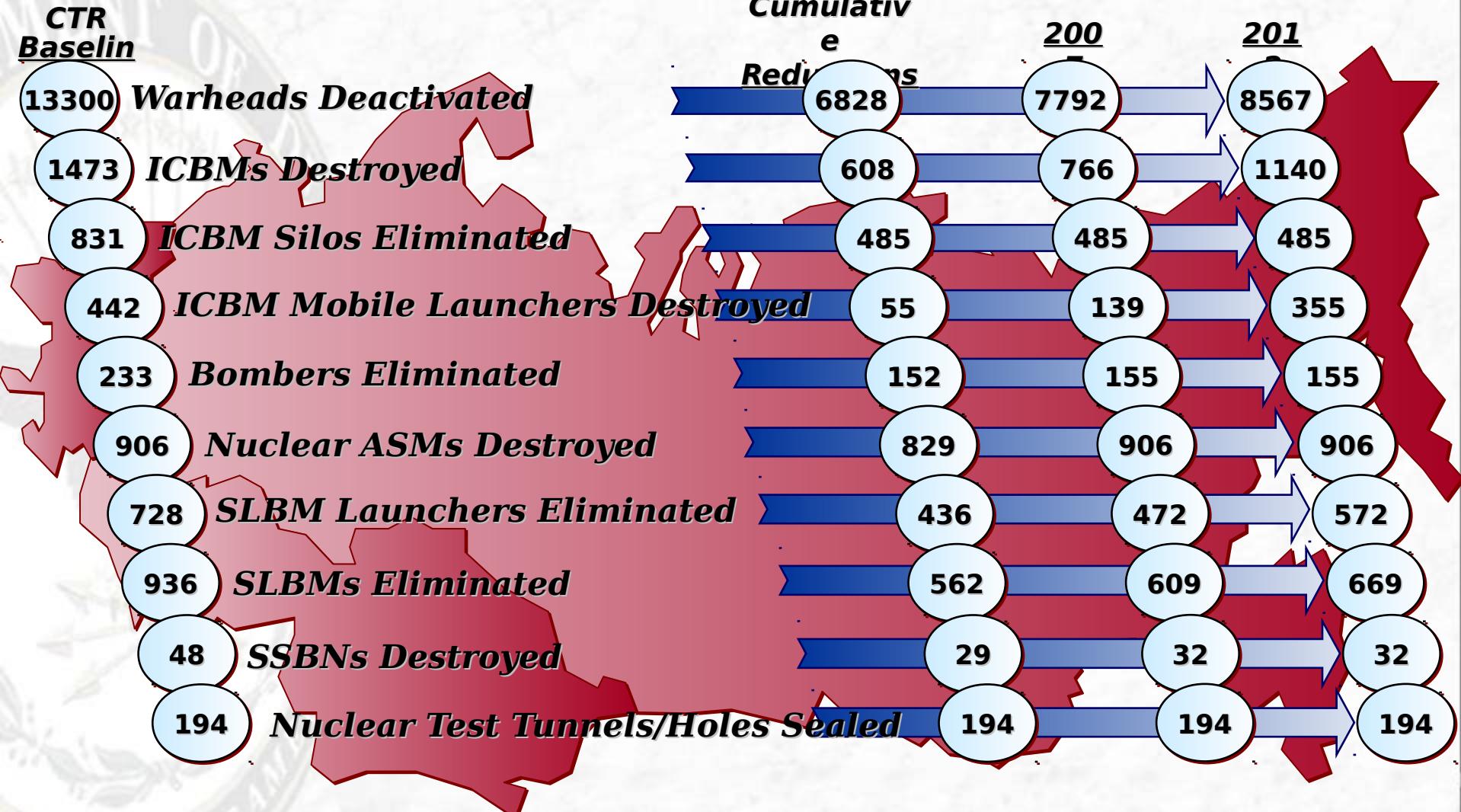
# Threat Reduction

- Cooperative Threat Reduction
- DoD Treaty Manager for NBC Weapons Treaties
  - NTBT, NPT/IAEA Strengthened Safeguards Proto FMCT, CWC, BWC

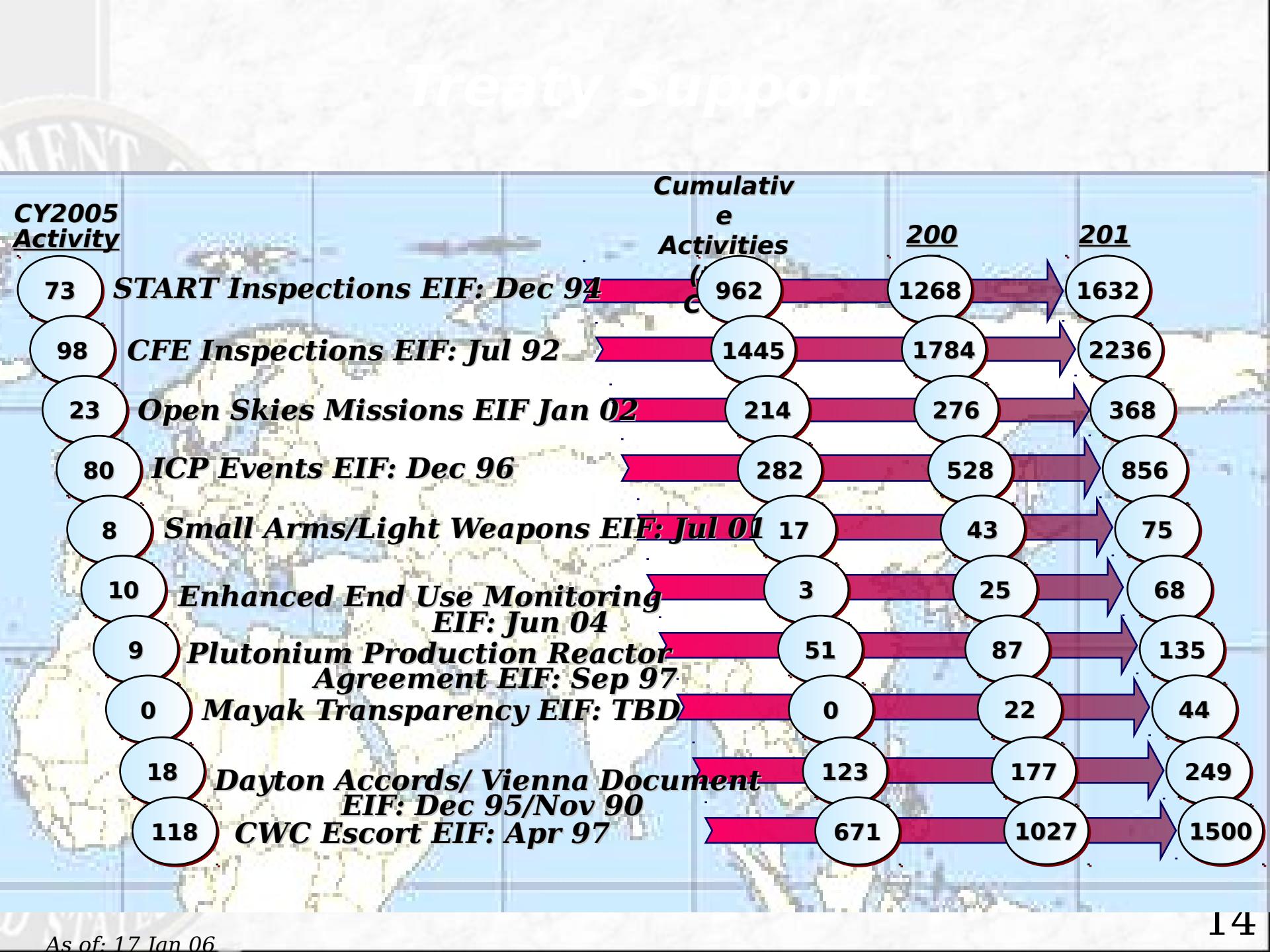


# Cooperative Threat Reduction

Ukraine, Kazakhstan, & Belarus are Nuclear Weapons Free



Current numbers as of 06 December 2005; projections as of 31 Dec 2005



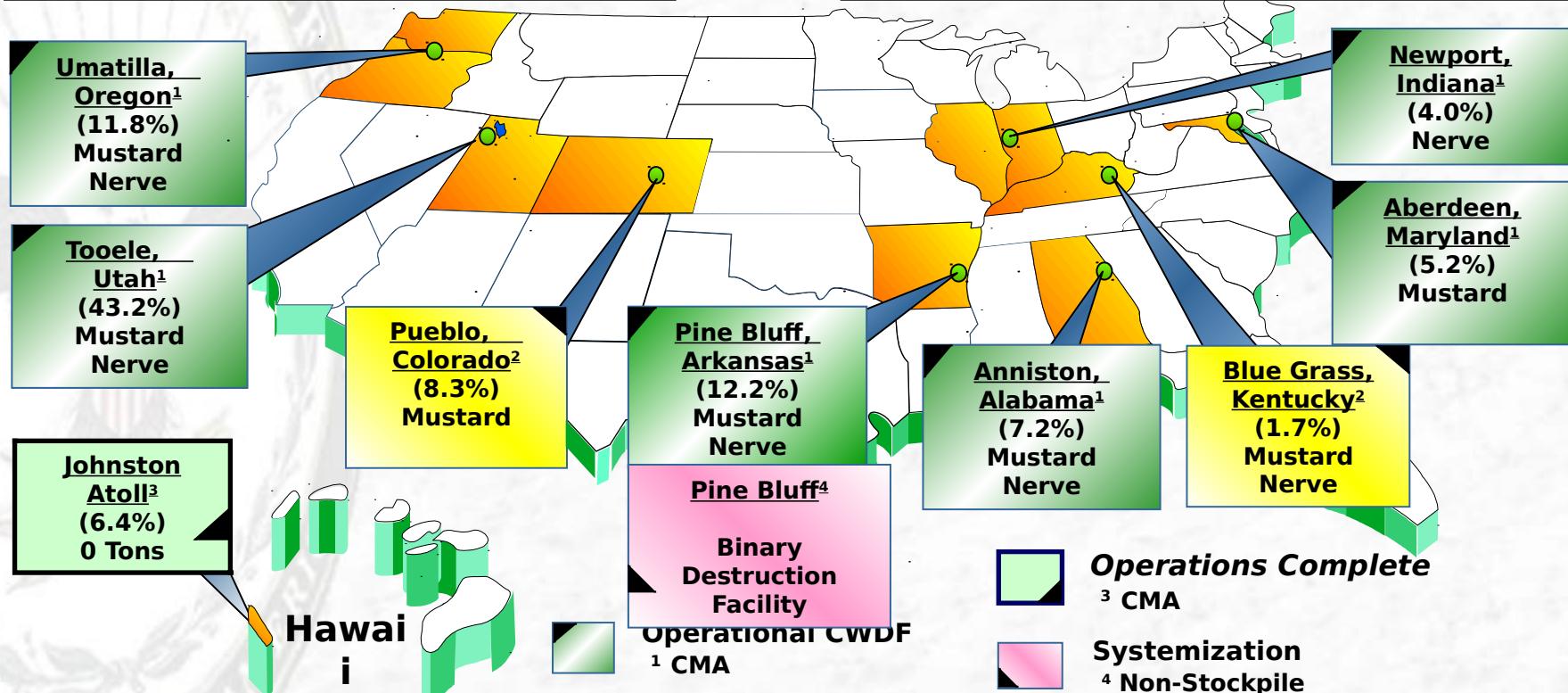
# Chemical Stockpile/Destruction Sites as of January 8, 2006

## Original Stockpile

Total Original Stockpile: **31,498 Tons**  
 Remaining Stockpile: **19,554 Tons**  
 Quantity Destroyed: **11,944 Tons**  
 Percent Destroyed: **37.9%**

## CWC Declared Stockpile

Total Declared Stockpile: **30,612 Tons**  
 Remaining Declared Stockpile: **19,739 Tons**  
 Declared Quantity Destroyed: **10,873 Tons**  
 Declared Percent Destroyed: **35.5%**



# Chemical and Biological Defense

## CB Threats & Hazards

Agent Delivery

Doses on Target

Downwind Dispersal

Doses Absorbed

Symptoms

Sustained Combat



Medical Pretreatment



Individual & Collective Protection



Contamination Avoidance and NBC Battle Management



Installation Force Protection



Medical Treatment



Information Systems



Decontamination and Restoration

*An integrated response to the threat is required -  
There will be no Silver Bullet!*

# Key Initiatives for the CB Defense Program

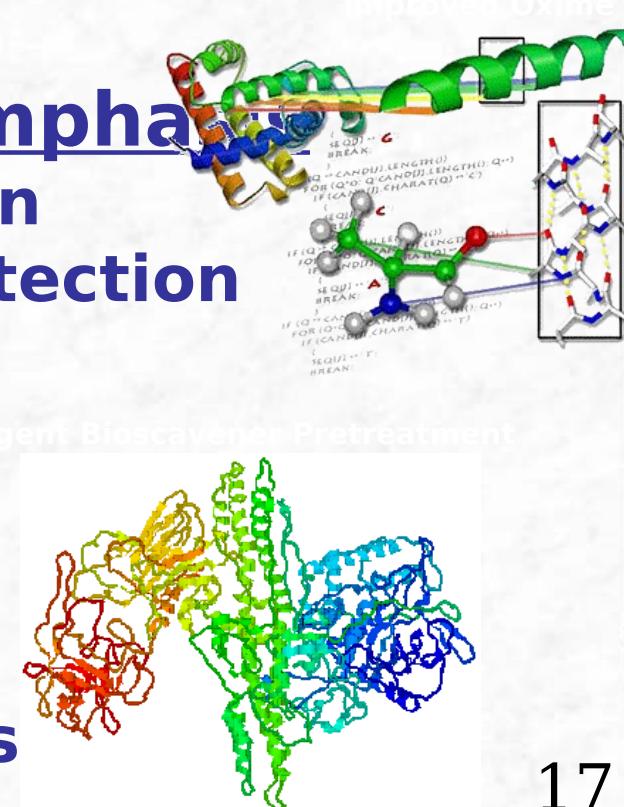
# Infrastructure Improvements

- **Test & Evaluation Facilities**
- **Non-Traditional Agent (NTA) Test Chamber**
- **USAMRIID Recapitalization**

## R&D Areas of Additional Emphasis

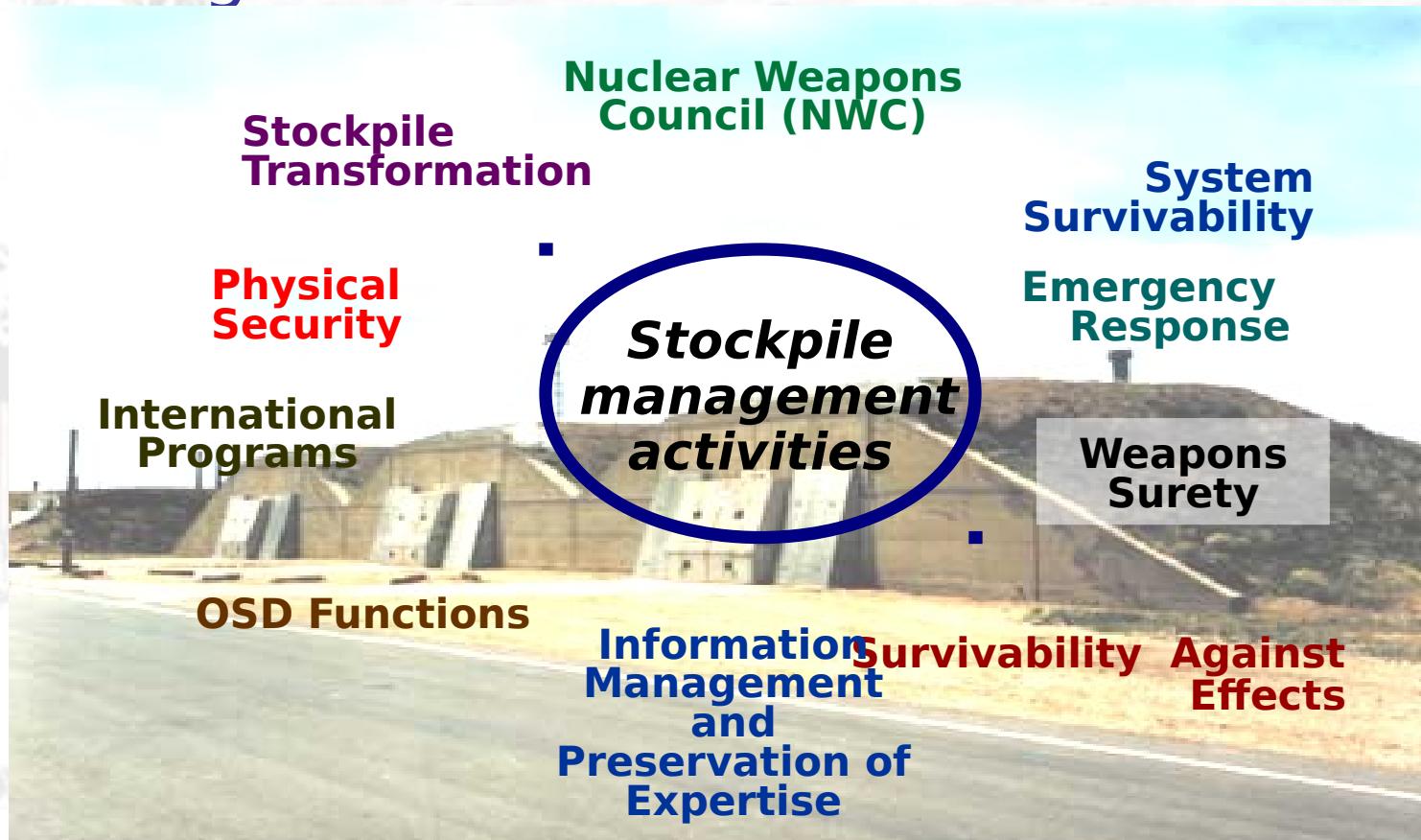
- S&T for Non-Traditional detection
- Biological point and standoff detection
- Chemical point detection
- Medical Prophylaxis
- Battle Analysis
- Decontamination
- Bio Defense Initiatives

**(Advanced Medical Countermeasures)**



# *Nuclear Matters*

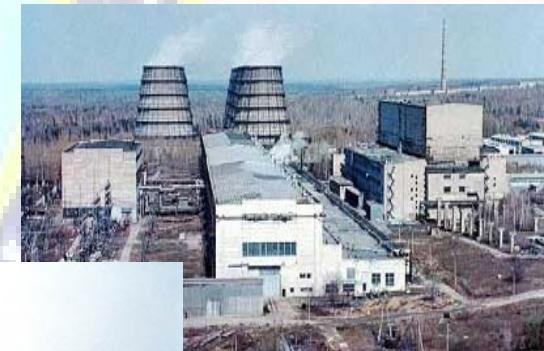
DOD focal point for nuclear stockpile management



# *Defense Threat Reduction Agency (DTRA)*



*Mission  
Safeguard America  
and its allies from  
Weapons  
of Mass Destruction  
by providing  
capabilities to  
reduce, eliminate  
and counter the  
threat and  
its effe*



# ***Defense Threat Reduction Agency (DTRA)***

## ***Combat Support Role***

**To provide warfighting support to the Joint Chiefs of Staff, the Joint Staff, the Combatant Commands and military services to engage the threat and challenges posed to the United States, its forces and allies by weapons of mass destruction.**



**Pentagon reconstruction using DTRA-developed blast mitigation techniques.**



**Running ACTDs and Providing Consequence Management Teams**

# *Summary*

ATSD(NCB) oversees DoD nuclear and chemical and biological defense programs

- Alignment with guidance
- Strategy and investment integration
- Internal and external coordination
- Resource review and approval